FIG. 1

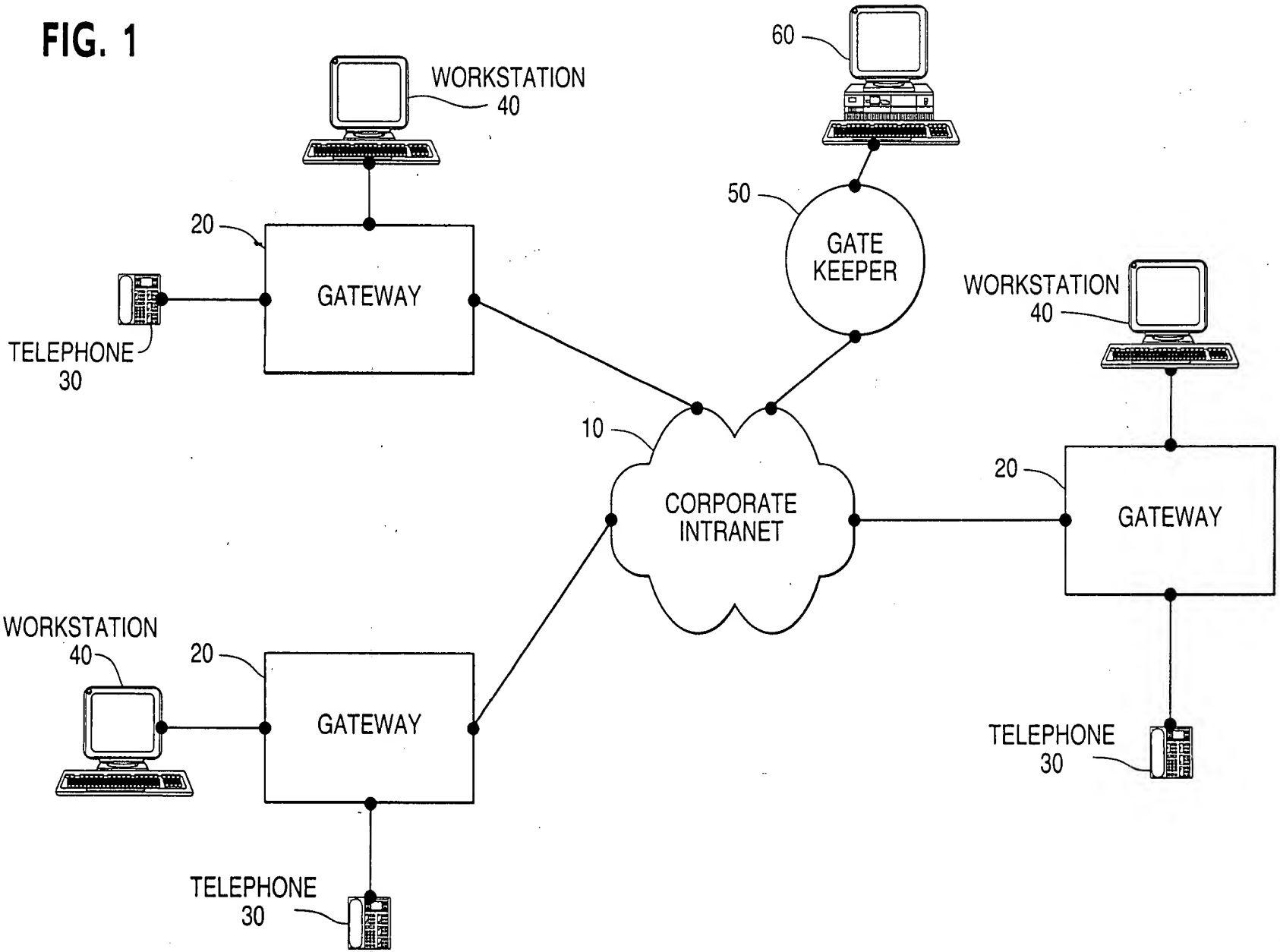

WORKSTATION
40
60
50
GATE
KEEPER
20
GATEWAY
TELEPHONE
30
10
CORPORATE
INTRANET
WORKSTATION
40
20
GATEWAY
WORKSTATION
40
20
GATEWAY
TELEPHONE
30
TELEPHONE
30

FIG. 2

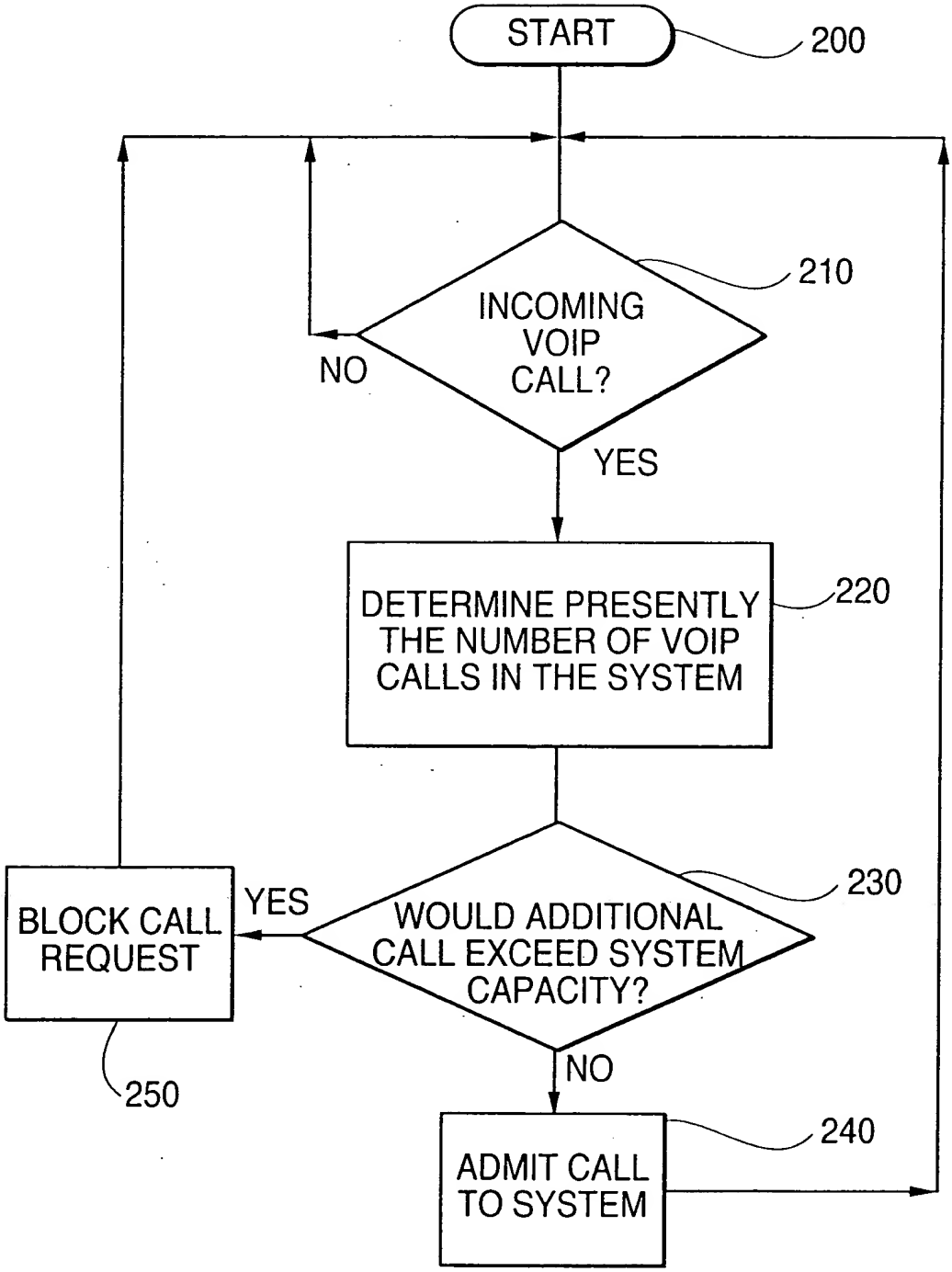

START
200
INCOMING VOIP CALL?
210
NO
YES
DETERMINE PRESENTLY THE NUMBER OF VOIP CALLS IN THE SYSTEM
220
WOULD ADDITIONAL CALL EXCEED SYSTEM CAPACITY?
230
YES
NO
BLOCK CALL REQUEST
250
ADMIT CALL TO SYSTEM
240

FIG. 3

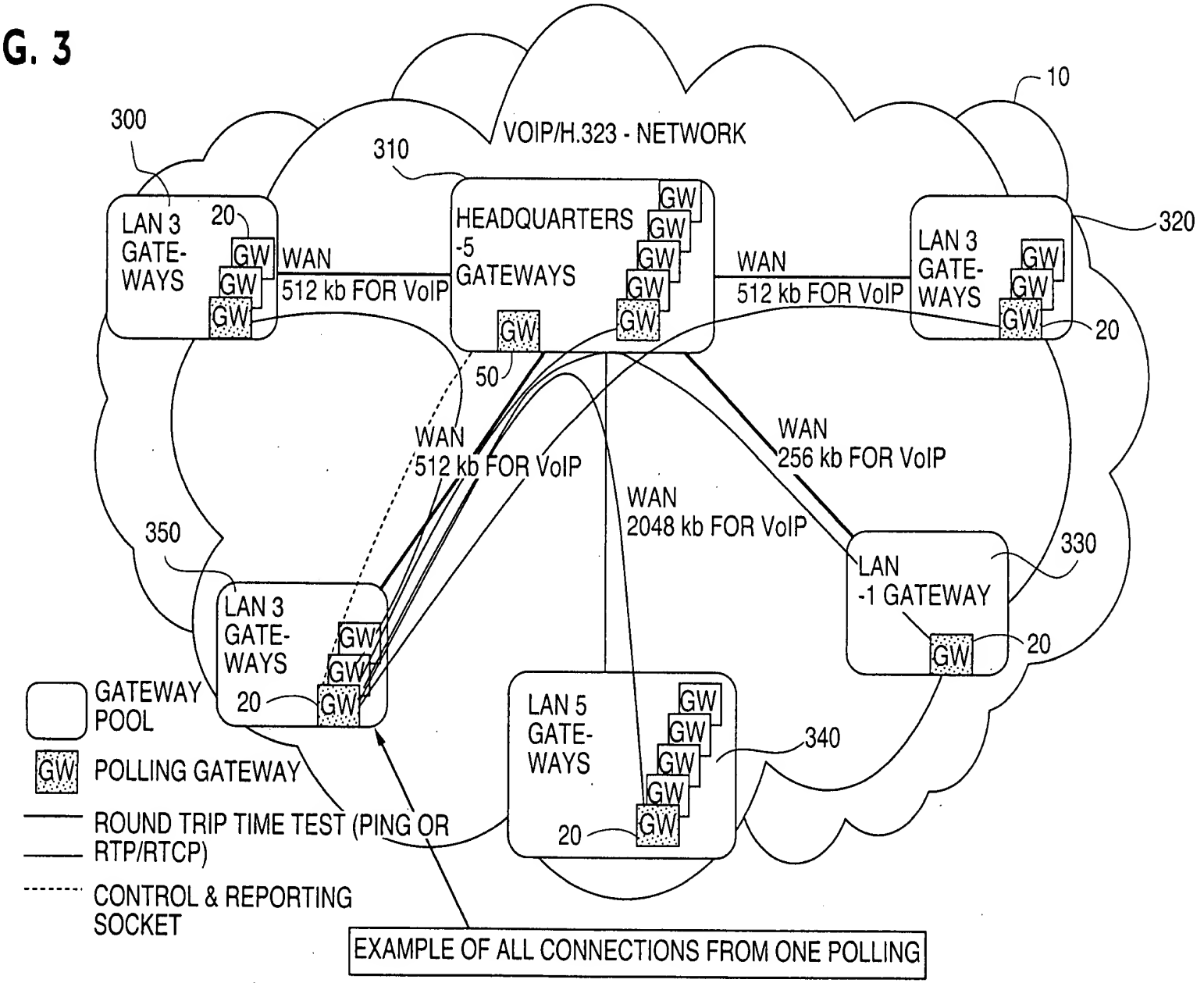

VOIP/H.323 - NETWORK
10
300
310
320
330
340
350
LAN 3 GATE-WAYS
20
GW
WAN
512 kb FOR VoIP
HEADQUARTERS -5 GATEWAYS
50
WAN
512 kb FOR VoIP
LAN 3 GATE-WAYS
WAN
256 kb FOR VoIP
WAN
2048 kb FOR VoIP
LAN -1 GATEWAY
LAN 3 GATE-WAYS
LAN 5 GATE-WAYS
GATEWAY POOL
POLLING GATEWAY
ROUND TRIP TIME TEST (PING OR RTP/RTCP)
CONTROL & REPORTING SOCKET
EXAMPLE OF ALL CONNECTIONS FROM ONE POLLING

FIG. 4

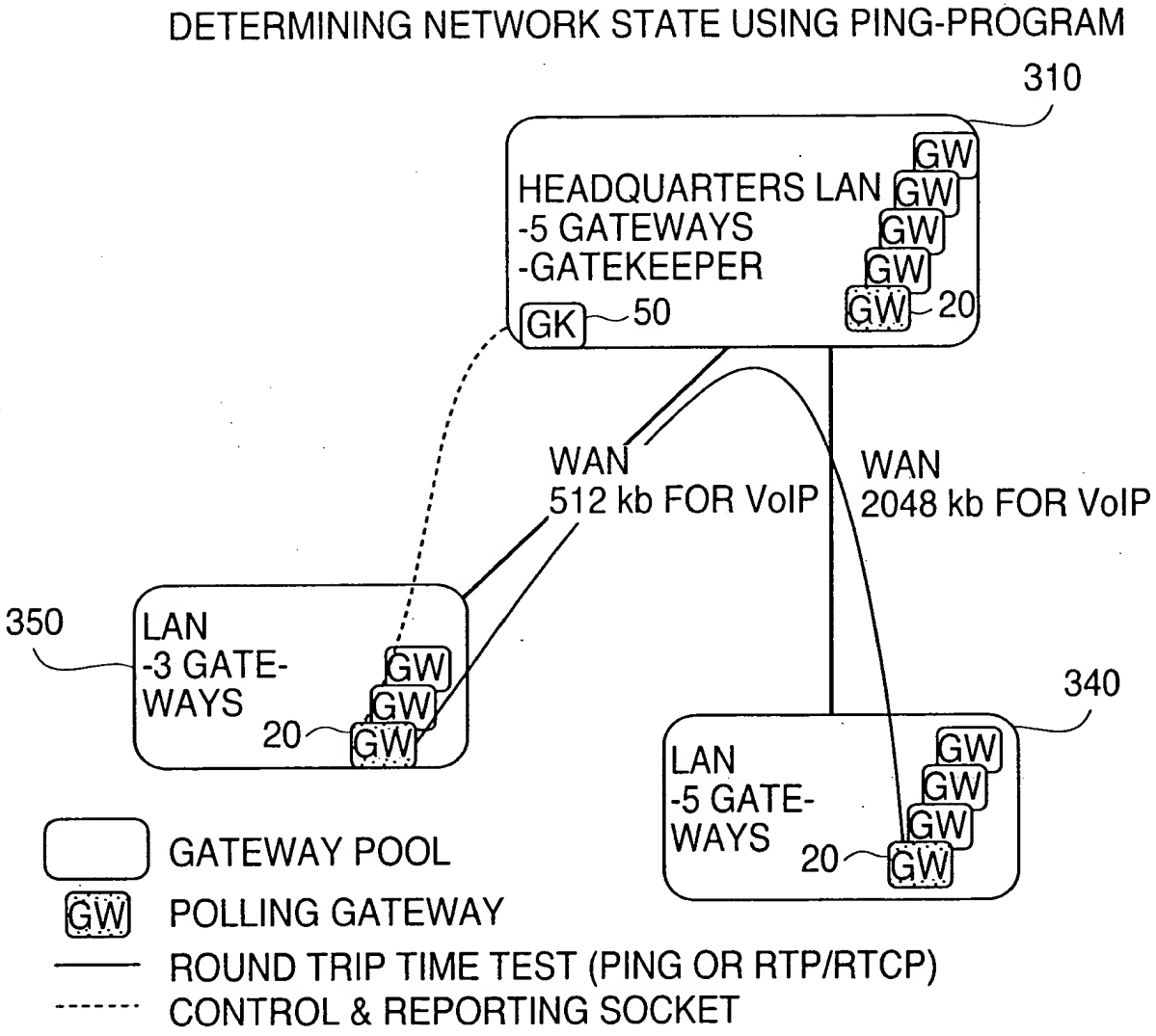
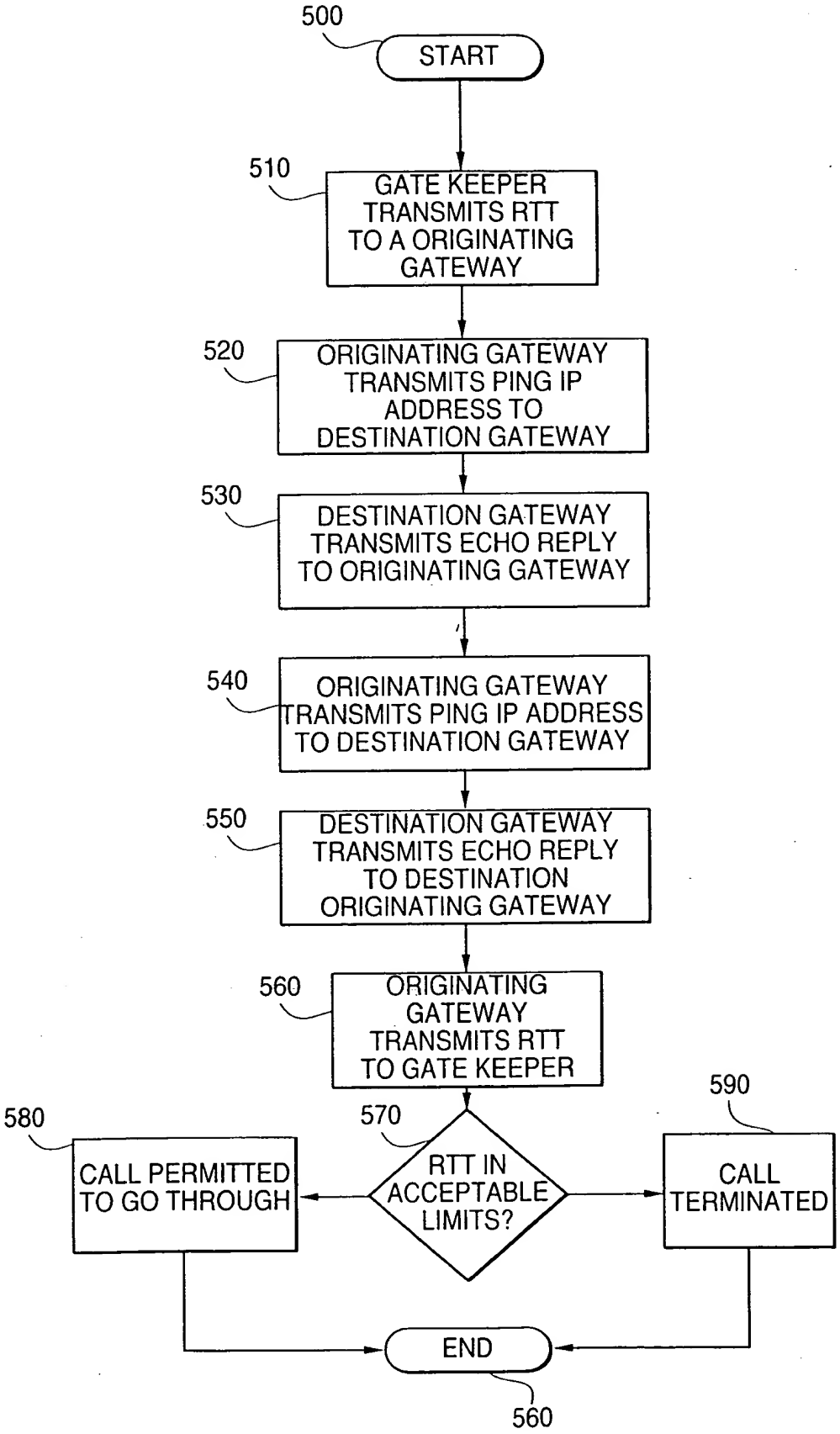

DETERMINING NETWORK STATE USING PING-PROGRAM
310
HEADQUARTERS LAN
-5 GATEWAYS
-GATEKEEPER
GK
50
GW
20
WAN
512 kb FOR VoIP
WAN
2048 kb FOR VoIP
350
LAN
-3 GATE-
WAYS
20
340
LAN
-5 GATE-
WAYS
20
GATEWAY POOL
POLLING GATEWAY
ROUND TRIP TIME TEST (PING OR RTP/RTCP)
CONTROL & REPORTING SOCKET

FIG. 5


500
START
510
GATE KEEPER TRANSMITS RTT TO A ORIGINATING GATEWAY
520
ORIGINATING GATEWAY TRANSMITS PING IP ADDRESS TO DESTINATION GATEWAY
530
DESTINATION GATEWAY TRANSMITS ECHO REPLY TO ORIGINATING GATEWAY
540
ORIGINATING GATEWAY TRANSMITS PING IP ADDRESS TO DESTINATION GATEWAY
550
DESTINATION GATEWAY TRANSMITS ECHO REPLY TO DESTINATION ORIGINATING GATEWAY
560
ORIGINATING GATEWAY TRANSMITS RTT TO GATE KEEPER
570
RTT IN ACCEPTABLE LIMITS?
580
CALL PERMITTED TO GO THROUGH
590
CALL TERMINATED
END
560